

Chapter 1: Exponential, Logarithmic, and Trigonometric Functions

Name: \_\_\_\_\_

1.1. Complete the table below. Round your answers to the nearest hundredth. Show your work.

1	2	3	4	5	6	7	8	9	10
10 <sup>x</sup>									
ln x									
e <sup>x</sup>									
ln e <sup>x</sup>									

1	2	3	4	5	6	7	8	9	10
ln x									
e <sup>x</sup>									
ln e <sup>x</sup>									

Approximate values:  
ln 2 ≈ 0.6931, ln 3 ≈ 1.0986

Approximate values:  
e<sup>0.5</sup> ≈ 1.6487  
ln e<sup>0.5</sup> ≈ 0.5  
e<sup>1.5</sup> ≈ 4.4817, ln e<sup>1.5</sup> ≈ 1.5

1.2. Complete the table below. Round your answers to the nearest hundredth.

ln e<sup>2.5</sup> = \_\_\_\_\_

ln e<sup>ln 2</sup> = \_\_\_\_\_

ln e<sup>ln 2</sup> = \_\_\_\_\_

ln e<sup>ln 2</sup> = \_\_\_\_\_

1.3. Sketch the graphs of the functions.

(a)  $y = \ln(x - 1)$



(b)  $y = e^{x-1}$



1.4. Complete the table below. Round your answers to the nearest hundredth.

ln e<sup>2.5</sup> = \_\_\_\_\_  
ln e<sup>ln 2</sup> = \_\_\_\_\_  
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